The apothecia are small to medium in size, often very numerous, are sub-pedicellate with a dark reddish brown disk and a paler margin.

Habitat trees and rocks; very common in Canada and the United States.

LEPTOGIUM TREMELLOIDES (L. fil.) Fr. The thallus of this species is much like that of *L. pulchellum*, it is larger, with round, smooth, entire lobes which become crisped toward the center, and are covered more or less with concolorous granules, sometimes these are minute lobules. The color is somewhat lighter than that of *L. pulchellum*. The under side is the same color, and is wrinkled slightly.

The apothecia are medium, disk a dark red, which becomes convex, the margin is very thin.

Found in the Northern and Middle States on mossy rocks and on trees.

LEPTOGIUM MYOCHROUM (Ehrh., Schaer.) Tuckerm. Plate VI. Fig. 5. Thallus rather large with broad, flat lobes which are very coriaceous and entire, often sooty looking toward the center. In color a dull green when fresh, turning mouse color when dry. The lobes of the under side are slightly concave and are a light gray, covered with a fine ash colored nap.

The apothecia are rare; they are medium and flat, almost sessile, with a reddish brown disk, the border rugose and sometimes hirsute.

Found on trees and damp rocks; quite common in the Northern States.

In appearance *C. flaccidum* and *L. myochroum* are much alike, but the under side of the former is bare and in the latter it is velvety.

NOTES ON NOMENCLATURE III.

ELIZABETH G. BRITTON.

Brachelyma robustum (Cardot).

Cryphaeadelphus robustus Cardot. (Rev. BRY. **3**:6-8, 1904). M. Cardot has recently described this new species collected by R. M. Harper in Georgia and referred *Brachelyma subulatum* Sch. to the same genus.

He says of this new generic name that Müller had created it in 1851 in the second volume of the Synopsis Muscorum for *Fontinalis subulata* P. Beauv. as a subsection of the section *Dichelyma* of the genus *Neckera*. In the second edition of the Synopsis Muscorum Europaeorum, 1876, Schimper founded the genus *Brachelyma* for the same species. In his monograph of the *Fontinalaceae* in 1892, M. Cardot took up *Brachelyma*, but he states that this is an error, as according to the Paris Code, section 58, any subdivision of a genus takes rank over a later published generic name.

This name, besides being much less desirable than *Brachelyma*, is entirely misleading in its suggestion of relationship and M. Cardot renders himself particularly liable to ridicule in view of the numerous sarcastic paragraphs published by him on nomenclature in his Revision of the types of Hedwig!

PAPILLARIA NIGRESCENS (Sw.) Jaeg. & Sauerb.

In the BRYOLOGIST for March (1904) M. Cardot has failed to note that in the January number (p. 14) Louisiana was included in the range for this

species. Through the kindness of Prof. Wittrock, of the Botanical Museum at Stockholm, a fragment of the type from the Herbarium of Olaf Swartz, collected in Jamaica, was sent for comparison with Florida specimens. They represent the slender terminal branches of a specimen which Swartz says was a foot long. The branches are terete, as described, the leaves appressed, about 1 mm. long, acuminate with subulate points .1–.2 mm. long, and there are 2–5 papillae on each cell.

Papillaria nigrescens var. Donnellii (Aust.)

This variety differs in its bright green or yellow color, smaller size, more slender branches, many of the terminal ones being denuded at apex or ending in a leafy tip, leaves lanceolate-acuminate, cells papillose. There is but one fruiting specimen in the Austin Herbarium and that was collected in Louisiana by Dr. Charles Mohr. It has a seta 5 mm. long with conspicuous exserted paraphyses. The capsule is old and the peristome gone.

Some Florida specimens have shorter, less acuminate leaves with larger, less papillose cells. They are generally black and stouter, with short terete branches, and closely appressed leaves, and may be referable to either the var. *brevifolia* Hpe., type locality Brazil, or to the var. *illecebra* (Brid.) C.M., type locality Haiti, but no specimens of either of these exist in our herbarium Mr. Nash collected some specimens in Haiti (851) which are stouter, larger and darker colored than any from Florida. Specimens collected by Glaziou (7393) in Brazil show a marked difference between the branch-leaves and those of the stem, both in size and shape, and may be referable to *P. appressum* C. M.

PILOTRICHELLA CYMBIFOLIA (Sull.) Jaeg.

This name is wrongly cited by M. Cardot on p. 30 of the BRYOLOGIST, 1904, it should be given as above. It may be of interest to note that this species has clusters of septate gemmae in the axils of the leaves and evidently reproduces in this way, as the fruit is unknown.

PILOTRICHELLA LUDOVICIANA (C. M.) Jaeg.

I cannot agree with M. Cardot in reducing this species to *P. cymbifolia*, (Musci Am. Sept, 44. 1893.) as it appears to be more regularly pinnate, the leaves not decurrent with fewer quadrate alar cells than in *P. cymbifolia*, the alar cells forming a brown auricle, leaves longer and more acuminate and less distinctly serrate and papillose. No. 78 R. C. Musci Am. Sept. Exsicc. appears to be *P. Ludoviciana*. Austin described the fruit (Bot. Gaz. **4**:161, 1879). Nor can I agree with Kindberg (Br. Eu. & N. A. **1**:15, 1897) in referring both these species to *Pterobryum*.

Pilotrichella Floridana (Aust.).

Neckera (*Pilotrichum?*) *Floridana* Aust. Bot. Gaz. **4**:152, 1879. Specimens of this species cannot be found in Austin's Herbarium, but from the description it would seem to differ only from the two preceding in the simple or sparsely branched stems and almost entire minutely papillose leaves. It may be the young stages of *P. Ludoviciana*.

Ectropothecium Caloosiense (Aust.).

Hypnum (*Rhynchostegium?*) *Caloosiense* Aust. Bot. Gaz. **4**:161, 1879. This species was doubtfully referred to *Rhynchostegium* by Austin, and was placed with the species "insufficiently known and not certainly referable to this subgenus" by Lesquereux & James. Recent studies of these genera have convinced me that it undoubtedly belongs to *Ectropothecium* in the section with the leaves having long linear cells near *E. globitheca* (C. M.). Dr. Small has recently collected three species of this genus in Southern Florida.

HOMALOTHECIUM AND BURNETTIA.

In the discussion between Messrs. Cardot and Grout several synonyms have been overlooked, notably *Pleuropus* Griff. 1849, not Gray, 1821! The following are also synonyms:

Pterigynandrum subcapillatum Hedw. Spec. Musc. 83, t. 16, 1801.
Pterogonium subcapillatum Schwaegr. Suppl, **1**:1, 107, 1811.
Pterogonium decumbens Schwaegr. Suppl. **2**:1, 32, t. 110, 1823.
Lasia subcapillata Brid. Bryol. Univ. **2**:202, 1827.
Pterigynandrum brachycladon Brid. Bryol. Univ. **2**:185, 1827.
Pterogonium ascendens Schwaegr. Suppl. t. 243, 1828.
Hypnum subcapillatum C. M. Syn. Musc. **2**:352, 1851.
Homalothecium subcapillatum Sull. Mosses N. A, 63, t. 5, 1856.
Myrinia subcapillata Kindb. Can. Rec. Sci. **21**: 1894.
Platygyrium brachycladon Kindb. Can. Rec. Sci. **21**: 1894.
Helicodontium subcapillatum Kindb. Br. Eu. & N. Am. **1**:27, 1897.
Homalothecium (Homalotheciella) subcapillatum Card. Bull. Herb. Boiss. **7**:374, 1899.
Burnettia (Homalothecium) subcapillatum Grout Bryol. **6**:65, 1903.

In my opinion *H. subcapillatum* is generically distinct from *H. sericeum* and *H. Phillipeanum*, and M. Cardot is right in calling it *Homalotheciella* according to the Paris Code. Dr. Grout has cited (Homalothecium) in parenthesis as if it were a section of *Burnettia*, and according to the new Philadelphia Code his combination is "*incidental*" and *incorrect!* Even in the last BRYOLOGIST, M. Cardot's name has priority of place, and Dr. Grout has used an American name for two European species.

New York Botanical Garden.

THE SPECIFIC (?) VALUE OF THE POSITION OF THE REPRODUCTIVE ORGANS IN BRYUM.

A. J. GROUT.

I have for a long time been of the opinion that the genus Bryum contains far too many species based chiefly on the position of the antheridia and archegonia. From the very nature of the case, if we accept the teachings of the theory of evolution, these characters must at some period in the development of the genus have been variable, e. g , at the time when dioicous species developed from monoicous ancestry there must have been a period when the species was imperfectly dioicous before it could become completely and fixedly dioicous. There are several well known cases in the